IN THE DRAWINGS

Please replace Sheet 2/2 of the existing drawings with a replacement sheet bearing amended Figure 7, as well as Figures 5-6, and 8, which are not presently amended.

Please add an additional drawing sheet bearing newly presented Fig. 9.

For the sake of clarity, Figure 7 is amended to delineate a portion of a decking system of the invention depicted in greater detail by newly presented Figure 9.

The replacement sheet bearing the drawing with the aforesaid correction of Fig. 7 and the newly added sheet bearing Fig. 9 are contained in an Appendix to the present paper.

REMARKS

Claims 29-38 are currently pending in the instant application, claims 1-28 having previously been cancelled.

In order to emphasize the patentable distinctions of applicant's contribution to the art, claim 29 has been amended to recite that the claimed anchoring device has a top view configuration which includes two substantially parallel sides and is configured to maintain the top element in a predetermined position during use for joinder of the two adjacent boards and the support board, the sides of the top element engaging the receiving slots of the adjacent decking boards.

For the sake of clarity, and in accordance with the Examiner's helpful suggestion, claim 33 has been amended to correct an obvious typographical error, namely the presence of two commas following the words "two ends" in line 3, and to add the prepositional phrase –of said top element– after the words "said sides," which the phrase clearly modifies. The recitation of "said decking boards are situated atop said support board" in line 35 has been deleted as being redundant in view of the recitation of the same limitation in lines 5-6. Claim 33 has further been amended to call for the top view configuration of the anchoring device to include two substantially parallel sides.

Support for this amendment is found in the specification; particularly, at page 22, lines 4-10; page 27, lines 10-11; page 31, line 15 through page 32, line 1; page 32, lines 11-15; and FIG. 7. Consequently, no new matter has been added.

Claim 35 has been cancelled to expedite prosecution.

Pending claims 29-32, as amended, are directed to an anchoring device adapted to secure two adjacent decking boards to a supporting member, while claims 33-34 and 36-38, as amended, relate to a decking system comprising decking boards secured to supporting members using an anchoring device, e.g. of the type delineated by claims 29-32. An embodiment of the decking system, including an anchoring device, is depicted by presently amended Fig. 7 of the instant specification, which is reproduced below for convenience.

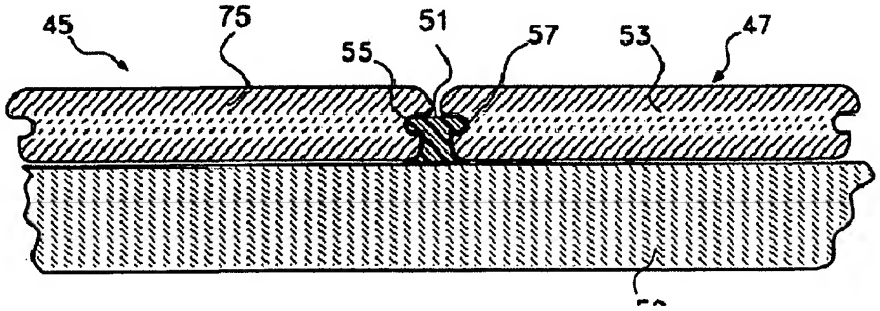


Fig. 7

(USSN 10/037,325)

As set forth by the specification, e.g. at page 31, line 14 to page 32, line 7, as amended, and with reference to amended FIG. 7, first and second horizontal beams (decking boards) 45 and 47 are secured to joist beam 59 using anchoring device 51. Horizontal beams 45, 47 are preferably composed of synthetic polymers, at least partially foamed synthetic polymer, wood, wood composite, or combinations thereof. Slots 55 and 57 preferably are pre-cut in the respective sides of beams 45 and 47 and

preferably extend along the entire length of the beams. The decking system is installed by placing first beam 45 atop joist beam 59, inserting a side of anchoring device 1 into slot 55, and securing anchoring device 51 to joist beam 59 by driving a fastener, such as a nail, staple, or screw, through device 51 into joist beam 59. Thereafter, the next decking board, e.g. beam 47, is placed alongside beam 45 atop joist beam 59, and slid so that the side of anchoring device 51 opposite beam 45 engages slot 57. A sufficient number of such anchoring devices 51 are used to provide adequate attachment of the beams 45, 47 to the supporting joist beam 59. The process is repeated to provide a sufficient number of substantially parallel horizontal beams that together provide a decked area of the desired dimensions. Ordinarily, an anchoring device 51 is used to attach each adjacent pair of horizontal beams comprising the finished deck structure at each point at which the horizontal beams cross a joist beam of the supporting structure. Newly added Fig. 9 details one implementation of the attachment of the decking boards to the supporting joist 59, by means of a screw 52 driven through the anchoring device 51. The respective sides of the top element of device 51 engage the receiving slots 55, 57 of the decking boards.

The use of the anchoring devices to secure the horizontal beams in the manner depicted by Figs. 7 and 9 permits a deck structure to be installed without any mechanical fasteners penetrating the exposed, finished top surface of the horizontal beams. The holes and defects created by conventional construction, in which screws, nails, or the like are driven directly through the horizontal beams' surface into the supporting structure are aesthetically undesirable, and are prone to cause injury to the feet of persons walking barefoot on the surface. In addition, the holes or defects

frequently will collect water, dirt, and other debris. Conventional wood decking boards are highly likely to have rot initiate at these locations as a result.

DRAWING OBJECTIONS

The Examiner has objected under 37 CFR 1.83(a) to the drawings entered on June 8, 2009, alleging that the drawings fail to show every feature of the invention specified in the claims. In particular, he maintained that the drawings fail to show the anchoring device being anchored by a metal fastener driven therethrough, as recited by claim 33 (and claims 34-38 dependent thereon).

For the sake of clarity, new FIG. 9 has been added to depict in greater detail a portion of the decking system of FIG. 7, which is exemplary of the decking system recited by claim 33. FIG. 9 depicts anchoring device 51, through which is driven a metal fastener, such as screw 52, that anchors device 51 to support board 59. The anchoring device thus joins and supports decking boards 53, 75 on the support board 59. Present FIG. 7 has been amended to indicate schematically the portion of the decking system assembly that is further depicted by FIG. 9.

Support for newly added FIG. 9 is provided by the specification as originally filed; particularly, at page 24, lines 14-16; page 32, lines 1-7; and claims 8, 14, and 18. Consequently, no new matter has been added.

Further for the sake of clarity, the specification has been amended in the Brief Description of the Drawings at pages 26-27 to make reference to new FIG. 9. The Detailed Description of the Present Invention also has been amended to make reference to new FIG. 9. In particular, a new paragraph is inserted at page 34, line 4.

In view of the amendment of FIG. 7, the addition of FIG. 9, the amendments of the specification, and the remarks set forth above, it is submitted that the objection to the drawing as failing to show every feature of the claimed invention has been mooted.

Reconsideration and withdrawal of the objection under 37 CFR 1.83(a) to the drawings is thus respectfully requested.

CLAIM OBJECTIONS

The Examiner has objected to claim 33 as being informal, pointing to the presence of an extraneous comma in line three and the desirability of adding the prepositional phrase –of said top element– after the words "said sides." Appreciation is expressed for the Examiner's helpful suggestions regarding this claim and his effort to advance prosecution by presuming the presence of these modifications. Both changes have been made by amendment of claim 33 in the manner suggested. Accordingly, it is submitted that any basis for objection to claim 33 has now been obviated. Reconsideration of the objection to claim 33 as being informal is hereby requested.

REJECTIONS UNDER 35 USC 112

Claims 33-38 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. In particular, the Examiner has stated that the phrase

"said decking boards are situated atop said support board" in line 35 of claim 33 is redundant in view of the recitation of the same feature in lines 5-6.

For the sake of clarity and to expedite prosecution, and as set forth above, claim 33 has been amended to remove the foregoing phrase from line 35. It is thus submitted that any redundancy has been obviated.

As best understood by applicant, the foregoing rejection of claims 34-38 under 35 USC 112, second paragraph, arose solely from the alleged defect inherited from claim 33. No separate grounds were adduced as to claims 34-38. Consequently, applicant submits that the amendment of claim 33 cures the infirmity, if any, of claims 34-38.

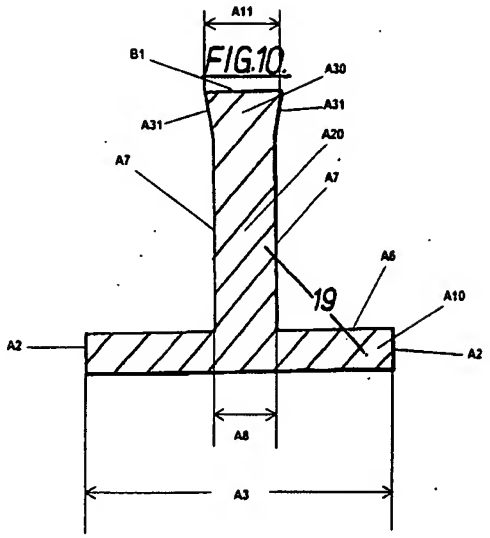
In view of the amendment of claim 33 and the foregoing remarks, it is respectfully submitted that claim 33 (and claims 34-38 dependent thereon), the requirements of 35 USC 112, second paragraph, by particularly pointing out and distinctly claiming the subject matter regarded as the invention.

Accordingly reconsideration of the rejection of claims 33-38 as lacking clarity and therefore failing to comply with the requirements of 35 USC 112, second paragraph, is respectfully requested.

REJECTIONS UNDER 35 USC 102

Claims 29, 31, and 32 were rejected under 35 U.S.C. §102(b) as being anticipated by Great Britain Patent GB 1,350,754 to Child ("the British patent").

For reference, a copy of Figure 10 of Child, including markings added by the Examiner, is reproduced below.



(GB 1,350,754, as annotated by the Examiner)

The British patent relates to the mounting of ceramic tiles on walls and similar substantially upright surfaces, and on floors and similar horizontal surfaces. No disclosure or suggestion is provided that would extend the teaching beyond this limited class of materials. The tiles are secured in position by a fixative preparation coated on the back surfaces of the tiles that adheres them to an underlying surface. In a conventional installation process, the fixative is allowed to attain strength, and thereafter a grouting medium is fed into the joints between adjacent tiles to fill up the joint spaces and provide a satisfactory finished appearance to the tiled surface.

Thus, the invention delineated by Child is said to "consist in a single square or oblong tile for mounting in position...and having already affixed to it before

being so mounted a preformed grouting strip along one or two edges only of the tile and visible from the face of the tile, the arrangement being such that when the tile with the grouting strip or strips affixed to it is mounted in position the grouping strips serve to space adjacent tiles apart by a predetermined distance." Page 1, lines 39-50, emphasis added. Significantly, Child relates exclusively to either glazed or nonglazed ceramic tiles. Page 1, col. 1, lines 10-12. Nothing in the specification or claims discloses or suggests that the patent's grouting strips have any application or utility for other materials, such as wood.

Referring to the supplemental designations he provided, the Examiner provided the following basis for his rejection of claim 29:

> **Regarding claim 29, the British patent discloses, in Figure 10, an anchoring device consisting essentially of a substantially flat horizontal top element A10, at least one substantially vertical support member A20, and a substantially flat horizontal bottom element A30. The top element A10 has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element A10 has an imaginary center line A4. The support member A20 is attached to an underside A6 of the top element A10 along the center line A4[1] and the support member A20 extends downwardly therefrom. The support member A20 has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element A30 has a flat bottom view configuration, which includes sides A31 and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8. The device is made of molded plastic material (column 4, lines 72-84).**

Applicant respectfully traverses the Examiner's contention that Child discloses every structural feature of the anchoring device delineated by claim 29, as would be required for a proper rejection under 35 USC §102(b).

[1] *Sic* – Applicant is unable to locate any designation of A4 in the Examiner's annotations of Fig. 10 of Child.

More specifically, applicant maintains that a person having ordinary skill would not regard Child as having disclosed any anchoring device, let alone applicant's anchoring device, within the meaning of that term as used in the instant application. The British patent does not use the nomenclature "anchoring device," or any other term that a skilled person would regard as comparable. Instead, as set forth above, the allegedly anticipatory article of Child, e.g. as depicted by Fig. 10 thereof, is specifically denominated a "preformed grouting strip." The function of this strip is said to be spacing the tiles apart by a predetermined distance. See col. 2, lines 46-50. There is no disclosure or suggestion that the strip plays any role in anchoring the ceramic tiles with which it is associated to a wall or floor surface, or even that the grouting strip could be used in such a manner. Instead, that anchoring function is separately provided by a fixative disposed between the back surface of the tiles and the surface (e.g. wall or subfloor) to which the tile is applied. *See, e.g.,* page 1, col. 1, lines 17-21 and page 2, col. 2, lines 89-91. Applicant therefore maintains that there is no basis on which the Examiner could reasonably assert that any "anchoring device," let alone applicant's particular device, is disclosed.

While applicant agrees that a statement of intended use is not *per se* a structural limitation, he still maintains that a prior art disclosure must be read as a whole, such that functional language that characterizes what a disclosed article must accomplish may, as in this instance, provide definite structural limitations of the article.

Thus, applicant's anchoring device is structurally distinguished from the preformed grouting strip of Child. Such a strip inherently must be sufficiently elongated to extend at least over substantially the full edge length of each tile. Were it

not of such length, it would be incapable of performing its grouting function. "Grout" is pertinently defined as "A fluid mixture of cement, sand, and water." *McGraw Hill Dictionary of Scientific and Technical Terms, Sixth Edition,* at 938 (2003). The skilled person would thus understand by extension that a "grouting strip" is a strip performing the same function as the particular cementitious material historically used as "grout," i.e. to seal a joint between adjacent pieces of tile or the like. Use of a "grouting strip" in connection with a decking system would prevent the proper drainage of water from the deck in the customary installation in which decking is exposed to the elements.

On the other hand, a person having ordinary skill in the art of deck construction would recognize that applicant's anchoring device would not be formed with a length corresponding to the full length of each decking board or even a substantial fraction thereof. Were it to be formed with such a length, it would not function properly for its intended use. Decking is typically installed in a location that exposes it to the elements, including rain, snow, and other sources of water. The individual decking boards are installed with intervening gaps, through which accumulated precipitation or other moisture and debris may drain. An anchoring device of extended length would effectively seal the space between adjacent decking boards, thereby preventing this drainage.

The Examiner has countered the foregoing argument as follows:

> **Applicant further argues that the strips of Child have different structure than applicant's decking board anchoring device. In response, this might be so. However, it is not the structure that is different about Child but rather what is Child lacking so that the reference does not anticipate the claim.**
>
> (Office Action of March 9, 2009, at 14).

Applicant specifically traverses this statement as being an improper statement of the law of anticipation of 35 USC 102. To the contrary, applicant respectfully maintains that it is settled law that anticipation requires that a prior reference disclose of every feature arranged as set forth in the claim. ("We thus hold that unless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102. *Net Moneyin, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008)).

Significantly, the Examiner has incorporated the Office Action dated March 9, 2009 into the present Office Action dated October 22, 2009. *See* page 13, last line. Accordingly, his own statement in the above-quoted passage, "This might be so," remains a prima facie admission that the features of applicant's claims are not dispositively disclosed in the reference applied, either expressly or implicitly, precluding the anticipation rejection issued.

In the present instance, applicant respectfully maintains that a person of ordinary skill in the art would regard the Child grouting strips as necessarily having an extended length that would preclude their use as applicant's decking board anchoring device. Such a difference would necessarily preclude any anticipation rejection, since any grouting strip produced in accordance with Child would necessarily have a structure different from that required by applicant's claims for his anchoring device.

Applicant further points to *Motorola, Inc. v. Interdigital Tech. Corp.*, in which the Federal Circuit established boundaries governing anticipatory prior art:

> **For a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in the prior art. *See In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) ('[T]he [prior art] reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it.' (citations omitted)). Although this disclosure requirement presupposes the knowledge of one skilled in the art of the claimed invention, that presumed knowledge does not grant a license to read into the prior art reference teachings that are not there." 121 F.3d 1461, 43 USPQ2d 1481, 1490 (Fed. Cir. 1997) (emphasis added)**

See also *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991), in which the Federal Circuit held that "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention" (emphasis added). Applicant respectfully submits that the foregoing remarks clearly establish the existence of structural differences of the very sort that the *Scripps* court envisioned. In addition, the attempt to cast the grouting strips of Child as being anchoring strips equally violates the *Motorola* court's prohibition against reading subject matter into the reference that is not fairly disclosed therein.

Applicant further submits that the preformed grouting material strip of Child and the anchoring device are properly distinguished under the standard articulated in *Union Oil Co. of Cal. v. Atlantic Richfield et al.*, 208 F.3d 989, 994, 54 USPQ2d 1227 (Fed. Cir. 2000) (holding that a claim reciting, in its preamble, "An unleaded gasoline suitable for combustion in an automotive engine" covered a fuel that would

regularly be used in autos, not that conceivably could be, thereby excluding from claim scope a broader class of petroleum formulations such as aviation fuels or racing fuels).

In the present instance, it is respectfully submitted that the preformed grouting material strip of Child and the anchoring device of claim 29 would be regarded by a person having ordinary skill in the art as having material structural differences inherent in their different functions, implicating the *Union Oil* standard. On the other hand, the Examiner's contention that the preformed grout material strip can be identified as an anchoring device contravenes these standards.

At page 5, the Examiner has also discounted applicant's claim recitation with respect to the terminology "adapted to," stating the following:

> **Applicant is reminded that the anchoring device can be adapted to maintain the top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position the bottom element upon a support board which two adjacent boards rest for attachment of the anchoring device to the support board for anchoring and support of the two adjacent boards.**

The import of the words chosen, "Applicant is reminded...," is unclear to applicant. As set forth above, applicant continues to maintain that the use of the terminology "adapted to" or "configured to" accords with established patent usage. While applicant agrees that a mere recitation of intended use cannot by itself convey patentability, he maintains that the courts have definitively recognized use of the formula "adapted to" as viable way of reciting structural features. *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429; 1432 (Fed. Cir. 1997), quoting *In re Swinehart*, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971) ("[T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent

claims."). Applicant maintains that the same considerations apply with at least equal force to the expression "configured to," now used in claim 29.[2] Moreover, applicant respectfully submits that the foregoing Examiner's statement amounts to nothing more than a reiteration of applicant's own claim, without any basis to substantiate any contention that Child discloses any device that is actually capable of carrying out the function recited by applicant's claims.

Applicant maintains that the foregoing functional limitations in fact positively recite further structural limitations that distinguish the anchoring device of claim 29 from any article disclosed or suggested by Child. There is no disclosure whatsoever in Child that "top"[3] element A10 is intended to be received into any groove of a tile or other article. To the contrary, Child universally teaches that element A10 is to be installed below the tiles and that the Fig. 10 strip is used with plain-edged tiles, whereas other configurations of grouting strips (e.g. strip 16 with interlocking, ear-like projections 16a) are to be used with grooved tiles. *See*, e.g., page 2, col. 1, lines 40-42 and Figs. 9-10; *compare* page 2, col. lines 28-32 and Figs. 4-6. Accordingly, applicant respectfully submits that a fair reading of Child contradicts the Examiner's proposition that width A8 of top element A10 is intended to be shaped and dimensioned so as to permit it to be received in a groove of any tile or other article. Significantly, Fig. 10, which the Examiner has cited, is said to be of a T-section strip appointed for use with a

[2] This statement was also made *verbatim* in the previous Office Action dated March 9, 2009, notwithstanding the substitution of the term "configured to" for "adapted to" made in the amendment dated June 8, 2009 in response to the March 9 Office Action. Thus, the Examiner's comments appear to be directed to a claim formulation no longer present in the instant application.

[3] Applicant reiterates that what the Examiner has annotated as element A10 is never called a top element in Child, and that element A10 is depicted as the bottom portion of the strip shown in Fig. 10. The "top" nomenclature is purely a designation bestowed by the Examiner. .

plain-edge tile, i.e., a tile lacking any edge groove or other like feature corresponding to the receiving slots delineated by claims 29 and 33. Page 2, col. 1, lines 11-13 and 40-43. Horizontal projections A2 of "top element" A10 are not received in any slot. Instead, element A10 is installed with its horizontal projection A2 underneath the back surface of each tile, and with the plain edge of each tile abutting sections A7 and A31 on each side of grouting strip 19.

The extended length of Child's grouting strip is apparent from Fig. 9, in which the same grouting strip 19 also depicted in Fig. 10 is seen to extend fully around two sides of tile 17. Clearly, the grouting strip must fill the gaps between adjacent tiles in their entirety for the grouting function to be carried out. *See also* page 2, col. 1, lines 40-43.

Although not specifically referenced by the Examiner, other tile forms disclosed by Child have recesses that are not grooves, but instead extend through the back surface of the tile and permit an interlocking connection. See, e.g., Figs. 7-8, showing recesses 17b appointed to receive ear-like or bead-like projections 18a from a grouting strip 18. On the other hand, there is no disclosure of any tile or the like having a pre-cut receiving slot, as recited by claims 29 and 33. Applicant thus maintains that the Examiner has improperly read into Child features that are not fairly disclosed therein. Specifically it is submitted that he has read into Child the particular shape and dimensions of features of applicant's anchoring device. These features, which are delineated by claims 29 and 33 using "adapted to" terminology, render the anchoring device capable of carrying out the disclosed anchoring function, and thus represent a distinction predicating patentability. Absent a showing that Child discloses any

embodiment that necessarily features every limitation of applicant's claims, an anticipation rejection is precluded.

Applicant further traverses the Examiner's conclusions concerning the recitation of "for joining two adjacent decking boards having pre-cut receiving slots and a support board" in the preamble of claim 29. Applicant agrees that taken by itself, this phrase does not add structure to the anchoring device, but submits that taken in context of the entire claim, structural limitations do indeed flow from that limitation.

First, the recitation provides antecedent basis for the recitation of the adjacent boards and the support board in the body of claim 29. Second, without proper dimensioning, the anchoring device of claim 29 would be unable to carry out the function of maintaining the top element in a predetermined position during use of the device for joinder of the two adjacent boards and the support board. *See, e.g.*, the specification at page 33, line 14, through page 34, line 3. Thus, the combination of the preamble's recitation of the anchoring function and the recitation that the configuration of the anchoring device must maintain the top element in a predetermined position is submitted to provide a clear and definite structural limitation. Thus, it must be given patentable weight. *See Catalina Mktg. Int'l v. Coolsavings*, 289 F.3d 801, 808; 62 USPQ2d 1781, 1784-86 (Fed. Cir. 2002).

Nevertheless, to expedite prosecution, claim 29 has been amended to call for the configuration of the anchoring device to be such that the sides of the top element engage the receiving slots of the adjacent decking boards, further emphasizing the structural limitation of the sides of the top element.

By way of contrast, Child does not even disclose an anchoring function for his grouting strip, for the reasons delineated above.

Claims 31 and 32 were also rejected. Applicant respectfully submits that these claims are not anticipated by the Child British patent for at least the same reasons as claim 29, from which they depend. Further with respect to these claims, the Examiner has pointed to sides A2 of top element A10 as allegedly being symmetric and parallel relative to one another. While applicant does not disagree with the assertions of symmetry and parallelism taken in isolation, he maintains that any such finding falls far short of the totality of the claim requirements delineated respectively by claims 31 and 32 and base claim 29. Applicant thus maintains that the foregoing statements, even if correct, does not cure the failure of the Child reference to disclose or suggest the subject matter of claim 29.

In view of the foregoing remarks, it is submitted that present claims 29, 31, and 32 patentably define over Child. Accordingly, reversal of the rejection of claims 29, 31, and 32 under 35 USC §102(b) over Child is respectfully requested.

REJECTIONS UNDER 35 USC 103(a)

Claim 30 was rejected under 35 U.S.C. §103(a) as being unpatentable over Child ("the British patent") in view of US Patent 4,154,172 to Curtis, Jr., which provides a system for attaching floor decking to a railroad car having an open floor structure of flanged beam members.

Applicant respectfully submits that the addition of Curtis, Jr. fails to cure Child's lack of disclosure or suggestion of the anchoring device of base claim 29, from which claim 30 depends. For example, applicant maintains that nothing in Curtis, Jr. overcomes Child's disclosure of the linear and transverse dimensioning that distinguishes a preformed grouting strip from applicant's anchoring device of claim 29. The Examiner has not pointed to any disclosure or suggestion in Curtis, Jr., to the contrary, or any basis on which to conclude that a skilled person would be motivated, in light of Curtis, Jr. or other prior art, to carry out the substantial reconstruction of Child's device needed to reach the subject matter of claim 29, let alone dependent claim 30.

As depicted by FIGS. 2-4 (reproduced below for convenience), Curtis provides a fastening member 17 that includes side-projecting top portions 25, 27 that engage complementary grooves 43 in the sides of plank member 19. Fastening member 17 also includes a slot 23 configured to engage one side of the top portion of I-beam 15. Slot 23 is necessarily perpendicular to the direction in which portions 25, 27 extend. Fastening member 17 is preferably constructed of metal, such as 1/8" steel.

FIG. 2

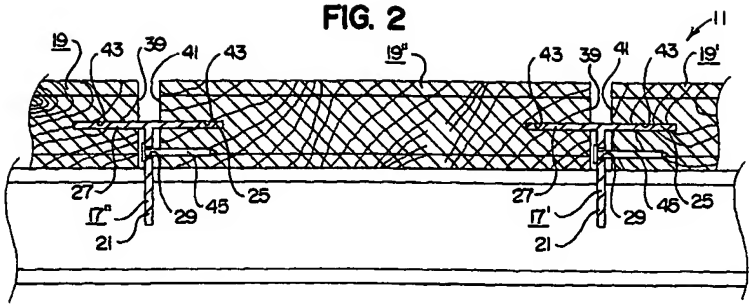


FIG. 3

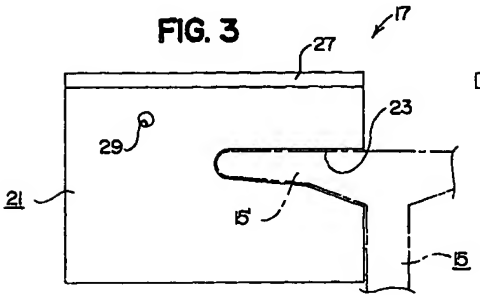
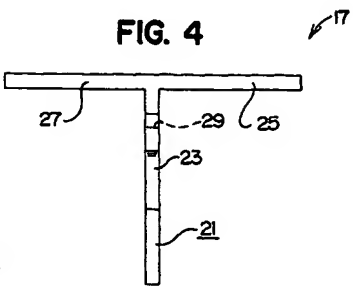


FIG. 4



The Examiner has stated that Curtis, Jr., teaches in Figs. 2 and 4, a support column 17', 21 having recesses to allow the insertion of a fastener therethrough. He then asserts that it would have been obvious to include recesses on the vertical support member of Child to allow insertion of a fastener, thereby creating support columns between the recesses.

Applicant respectfully traverses the identification of items 17' and 21 of Curtis, Jr., as being, or even having, support columns. The Curtis specification calls items 17' and 21 a "fastening member" and a "vertical platelike body portion of a fastening member," respectively. *See* col. 2, lines 59 and 20. As seen in Fig. 3 of Curtis, there is a small hole 29 through the vertical portion of members 17 or 17'. Hole 29 is necessarily small to carry out its intended function, i.e., to permit a nail to be driven generally horizontally, through the fastener and into the adjacent decking board,

whereas applicant's fastener is attached by a fastener driven into the supporting joist below the decking board.

While the Examiner has alleged that the difference between applicant's "support columns" and Curtis's "fastening member" is only semantic (*see* Office Action dated March 9, 2009 at page 18, final two lines), and thus not conveying patentable distinction, applicant maintains that item 17' cannot be construed as a support column, because the Curtis device lacks any structure that could be regarded as functioning as a base. Moreover, the question of whether a difference is only "semantic" must be framed in light of how a person having ordinary skill would understand the respective terms. *Phillips v. AWH Industries*, 415 F.3d 1303, 1320; 75 USPQ2d 1321 (Fed. Cir. 2005) (*en banc*) (cert. denied, 126 S. Ct. 1332, 164 L. Ed. 2d 49, 2006 U.S. LEXIS 1154 (U.S., 2006)). Applicant respectfully maintains the Examiner's assertion is in essence a conclusory statement, not supported by any analysis showing that a skilled artisan would view the difference as "only semantic." Furthermore, the Examiner's contention fails to address applicant's point that the Curtis structure lacks any element identifiable as a bottom element on which a support column could be said to rest. On the other hand, applicant's support column clearly connects the top and bottom elements of the anchoring device.

Of further significance, the only material disclosed by Curtis for his fastening member is steel (e.g., 1/8" steel, col. 2, line 34), and clearly not the plastic required by claim 29, on which claim 30 depends.

Applicant respectfully submits that a person having ordinary skill in the art would in no way regard a small hole, such as hole 29, as creating a columnar

structure in the Curtis device. Were the dimensions of aperture 29 in Curtis's device markedly enlarged, the aperture/hole would no longer carry out its intended function, i.e. receiving nail 49, precluding the Examiner's proposed reconstruction under *In re Gordon,* 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Still further, applicant maintains that the fastening member of Curtis operates in a different manner than the device of applicant's claims 29 and 30. Element (c) of claim 29 delineates a substantially flat horizontal bottom element having a flat bottom view configuration. It is further required that the anchoring device is configured in a manner such that the bottom element is "position[ed] upon a support board." By way of contrast, the bottom of the Curtis device is not positioned "upon" a support. Rather, as depicted most clearly by Curtis's Fig. 3, the device 17 includes within its vertical portion 21 a generally horizontally directed slot 23 that engages the support (i.e., the top flange 15' of an I-beam 15). *See, e.g.,* col. 2, lines 19-35 generally.

Based on the foregoing, applicant respectfully submits that the Examiner's alleged motivation for modifying the Child structure in light of Curtis is unavailing, because it would motivate only the inclusion of a small, horizontal hole to accept a fastener, but would not motivate the creation of the columnar structure recited by claims 30 and 34, which would defeat the purpose of Curtis's small fastener hole.

In view of the foregoing remarks, it is submitted that present claim 30 patentably defines over Child and Curtis, Jr. Accordingly, reconsideration of the rejection of claim 30 under 35 USC §103(a) as being unpatentable over Child and Curtis, Jr., is respectfully requested.

Claim 29 was rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181 to Fisher et al. in view of US Patent 6,012,256 to Aschheim.

Fisher et al. discloses a structural framing system and associated method for the construction thereof. The framing system is readily visualized in the depictions of Figs. 1-2 of Fisher et al., which are reproduced below for reference. Also reproduced is a version of Fig. 3 as marked up by the Examiner.

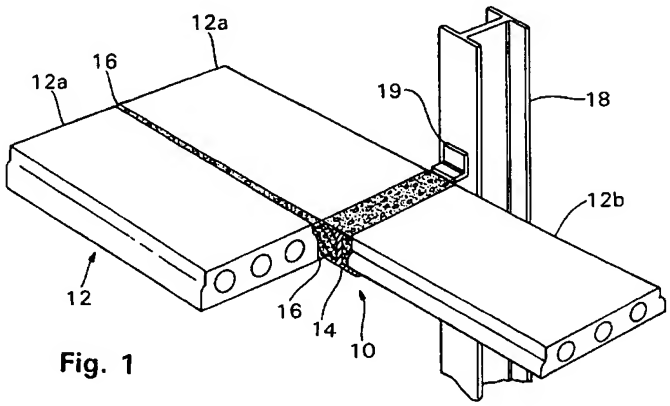


Fig. 1

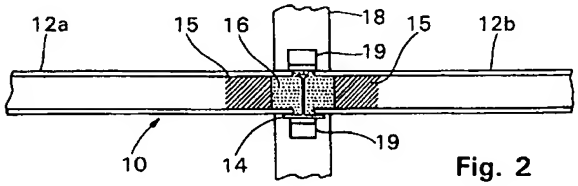
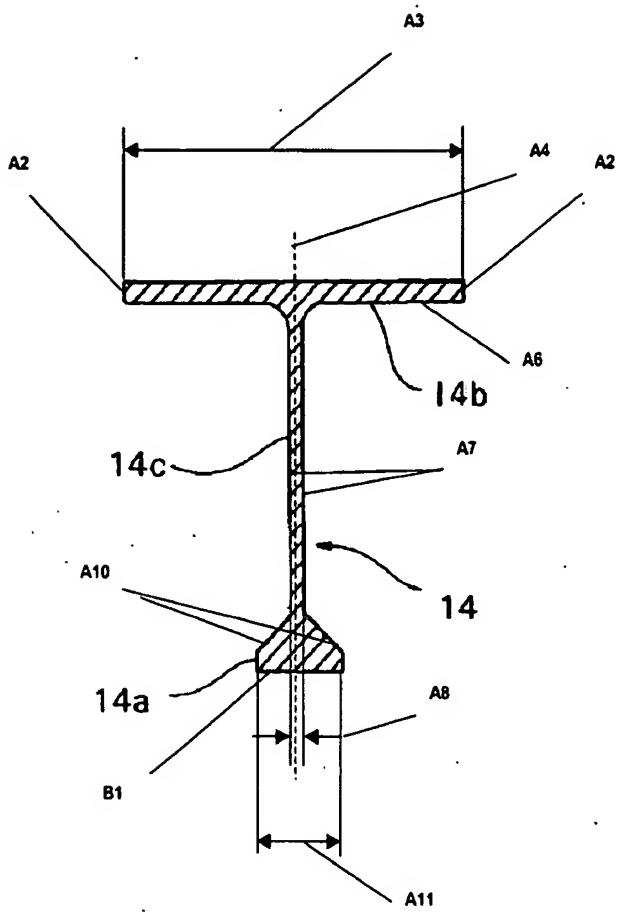


Fig. 2



With reference to Figs. 1-2 and Fig. 3, there is depicted specially configured dissymmetric steel beam 14, which is horizontally disposed and supported between adjacent vertical columns 18 erected on conventional foundations. Framing system 10 further comprises a series of concrete plank sections 12 installed in successive pairs 12a, 12b and joined together along either side of beam 14 using a high-strength grout material 16. Col. 2, lines 46-62. Plank sections 12 are said to be of conventional precast and prestressed, hollow core concrete construction. They are intended to have a substantially uniform thickness ranging from 6 to 12 inches, and span between adjacent structural steel vertical columns 18. Col. 2, lines 63-67. The construction assembly is said to involve first the placement and anchoring of beam 14

in a substantially horizontal position between adjacent vertical columns 18 supported upon, and connected to, seats 19 using conventional structural connection means. Col. 3, lines 36-39. Then the plank sections are placed onto the bottom flange of beam 14, on which they rest. Lines 42-55. The use of a high strength grout 16 is a further required component of the structural system. The grout is premixed and injected so that it completely fills the cavity and totally encases the dissymmetric beam 14. Lines 61-64. Significantly, no flange of beam 14 is received in any groove of the plank sections it supports.

Attention is drawn to the characterization of the Fisher et al. beam 14 as being a "specially-configured steel dissymmetric beam" (col. 2, lines 52-53). Applicant submits that the foregoing "special configuration" refers, *inter alia*, to the particular dimensioning required to permit the beam 14 to carry out its appointed functions. Specifically, beam 14 is used to support massive concrete planks 12, thereby imposing definite requirements of dimension and strength. Lower flange 14b must be sufficiently wide and thick to permit it to support concrete planks 12a and 12b, which rest upon it, both during the assembly and subsequent to the placement of grouting material 16. Lower flange 14b must also permit the flange to be placed on seats 19, to which flange 14 is connected "using conventional means for making the structural connection thereto" (col. 3, lines 36-38).

Claim 29 was rejected on the following basis:

> **Regarding claim 29, Fisher et al. disclose, in Figure 3, an anchoring device comprising a substantially flat horizontal top element 14b, at least one substantially vertical support member 14c, and a substantially flat horizontal bottom element 14a. The top element 14b has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The**

first width A3 is measured at a maximum width between the sides A2. The top element 14b has an imaginary center line A4. The support member 14c is attached to an underside A6 of the top element 14b along the center line A4 and the support member 14c extends downwardly therefrom. The support member 14c has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element 14a has a flat bottom view configuration which includes sides A10 and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width AS and the third width A11. The third width A11 is greater than the second width A8.

The Examiner has acknowledged that Fisher et al. fails to disclose a device made of molded plastic material, and has therefore combined Aschheim, which is directed to a structure and method for resisting episodic loads, such as those occurring during an earthquake.

The Examiner has relied on disclosure at col. 6, lines 2-13 of Fisher et al. for motivation to use a different material. The pertinent disclosure reads as follows:

> **It is therefore to be understood that various changes in the details, materials, steps, and arrangement parts, which have been described and illustrated to explain the nature of the present invention, may be made by those skilled in the art within the principles and scope of the invention as expressed in the appended claims.**

Applicant respectfully submits that the foregoing rejection is insufficient to predicate an obviousness rejection, even with the addition of Aschheim.

Applicant maintains that there is no disclosure or suggestion in Fisher et al. of any device having the construction, including the dimensions or functionality, of the anchoring device of claim 29. In particular, the Fisher et al. dissymmetric steel beam is not sized to permit it to maintain the top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position the bottom element upon a support board which the two adjacent

boards rest for attachment of the anchoring device to the support board for anchoring and support of the two adjacent boards. As would be recognized by a person having ordinary skill in the construction arts, decking boards of the type employed in the present invention most commonly have a thickness ranging from about 0.5 to 2 inches thick, whereas the concrete planks employed in the Fisher et al. construction are said to have a substantially uniform thickness which may range from about 6 to 12 inches. Col. 2, line 67 to col. 3, line 1. Put simply, Fisher's planks are vastly larger and heavier. Moreover, nothing in the construction of the dissymmetric structural steel beam 14 of Fisher et al. adapts it to be maintained in the predetermined position recited by claim 29, nor is it appointed for use with adjacent boards which have been pre-cut with receiving slots. The concrete planks 12a, 12b have no such receiving slots or, indeed, slots of any form. Instead, the dissymmetric structural steel beam 14 must be used in conjunction with high-strength grout 16, whereas applicant's decking system employs no such grout.

The present Office Action refers to the marked-up version of Fig. 3 of Fisher et al. included in a previous Office Action. Significantly, that version of Fig. 3 is depicted in an orientation that has been inverted with respect to Fig. 3 as it was originally presented in Fisher et al. The original orientation of Fig. 3 places the largest width of beam 14 (denoted as A3 by the Examiner) on the bottom, corresponding to its disposition in the finished construction shown in Figs. 1 and 2. By way of contrast, and without notice, the Examiner has placed the largest width (i.e. the width of flange 14b) on the top of the altered drawing. Applicant maintains that "top" and "bottom" as used in both Fisher et al. and the instant specification are terms of ordinary language. They

have not been imbued with any special technical meaning by applicant or by any of the prior art references applied, including Fisher et al. It is submitted that the Examiner's alteration is repugnant to ordinary meaning and thus impermissible, absent clear evidence to substantiate the change.

Applicant particularly traverses the Examiner's assertion that "The terms 'top' and 'bottom' are merely relative terms." (Office Action dated March 9, 2009, at 16.) The distinction between "top" and "bottom" is not a matter of mere semantics, because the "bottom" of Fisher et al.'s dissymmetric structural steel beam 14 is defined by the direction of gravity and the beam's function of supporting planks 12a, 12b. Likewise, the "top" and "bottom" of applicant's anchoring device are distinguished by manner in which decks are installed, with decking boards on "top" of support boards. The Examiner has repeatedly referred to Fig. 3 of Fisher et al., which he has modified by presenting it inverted from its original orientation, without acknowledgment. Applicant respectfully maintains that were the figure correctly presented, the lack of motivation to carry out the reconstruction required to obtain applicant's device would be readily apparent, because "top" and "bottom" indeed matter if the modification would require re-dimensioning both portions so as to properly carry out applicant's anchoring function.

The Examiner's assertion that "the rejected claims has [sic] no mention of gravity" (page 16) is untenable in light of the claim language, which does call for the adjacent deck boards to "rest" on the support board, clearly contemplating the operation of ordinary gravity. *See* claims 29, 33. It is respectfully submitted that understanding both applicant's teaching and the Fisher et al. reference would become nonsensical,

were it not possible to presume tacitly the existence of ordinary gravity, and the ordinary understanding of "up" and "down" that results.

It is further clear that the inversion of beam 14 in an actual building structure employing the construction depicted by Figs. 1 and 2 of Fisher et al. would have disastrous consequences. Were the Fisher et al. beam installed in the inverted position, it inherently could not support the concrete planks, which would have to rest on an angled surface of the trapezoidal "bottom," not on a flat surface. Clearly, no skilled artisan would contemplate such a configuration. The Fisher et al. reference does not disclose or suggest any function for dissymmetric structural steel beam 14 used in the inverted position implied by the Examiner's recasting of Fig. 3.

In response, the Examiner has contended that orientation cannot confer patentability. However, applicant maintains that the Examiner's reconstruction of Fisher et al.'s device involves far more than merely inverting the device actually taught. Instead, the disclosed orientation of the Fisher device does matter, inasmuch as it bears directly on the dimensional modifications required to reach applicant's device and whether a skilled person would have motivation for such modification.

The Examiner has cited the generic statement of Fisher et al. at col. 6, lines 2-13, in support of his proposition that a skilled person would contemplate making the disclosed beam of plastic instead of concrete. Applicant respectfully maintains this assertion flies in the face of repeated disclosure that the beam is a steel beam. No suggestion to the contrary or other specific material alternative is anywhere present in Fisher et al.

Rather, applicant maintains that a person of ordinary skill in the art would indubitably recognize the impossibility of substituting any known plastic for structural steel in the Fisher et al. dissymmetric beam. No plastic structure would conceivably have sufficient strength for it to support 6 – 12 inch thick concrete planks. The Examiner has not pointed to any reasonable motivation for a skilled worker, even in light of Aschheim, to change the Fisher et al. material, apart from hindsight afforded by the present application.

Aschheim discloses a "sustainer," which the Examiner has equated with applicant's anchoring device. (Office Action at page 9, line 1.) Applicant respectfully traverses this indication as being contrary to Aschheim's definition of a "sustainer" as including any member "that resists transverse loading such as a joist, a beam, a girder, or a column." Col. 6, lines 58-60. Applicant's anchoring device clearly cannot be equated with Aschheim's sustainer, since it does not accomplish the same function. Applicant further submits that Aschheim's very generic disclosure that sustainers could be made of many different materials (col. 1, lines 23-27) must be read in light of the function to be fulfilled by that sustainer in widely varying structures. Col. 1, lines 15-18. Applicant maintains that even if a plastic sustainer might be appropriate in certain of the Aschheim structures, a skilled person would not be motivated to construct any support beam of the type disclosed by Fisher et al. for concrete construction using plastic, since the Fisher et al. beam would be rendered inoperative for its intended function. *In re Gordon, supra.* Furthermore, the reconstruction proposed by the Examiner would require elimination of the critical grouting taught by Fisher et al. Applicant's decking system would be unworkable if installed with grouting in the

manner taught by Fisher et al., because the gaps between decking boards that permit collected water to drain would thereby be sealed, again precluding the Examiner's proposal under *Gordon*.

See also *In re Gal*, 980 F.2d 717, 25 USPQ2d 1076 (Fed. Cir. 1992) wherein a finding of "obvious design choice" was precluded where the claimed structure and the function it performed were different from the prior art. Applicant submits that the anchoring function of the present plastic anchoring device and the support function of the Fisher et al. dissymmetric steel beam are sufficiently different to invoke the *Gal* rule, negating any finding that the substitution is an "obvious design choice."

It is respectfully submitted that the Examiner has not provided any motivation to re-dimension the Fisher et al. dissymmetric steel bean so that it could carry out the function of supporting the decking structure in the configuration delineated by claim 29, apart from the hindsight of the present specification and claims. The need for such a substantial reconstruction is submitted to negate any finding of obviousness. *In re Ratti*, 270 F2d 810, 123 USPQ 349 (C.C.P.A. 1959).

Still further, applicant maintains that Fisher et al. is not analogous art, and thus is not properly applied against applicant's claims. Fisher et al. is directed specifically to techniques for construction using precast concrete planks with a steel supporting structure, whereas applicant's claims relate to construction using wood and wood-like decking boards and supporting framing. Applicant respectfully submits that these construction forms, materials, and techniques are so disparate that a skilled artisan would not be motivated to consider the Fisher et al. disclosure as pertinent to the

particular problems of attaching decking boards to supporting beams of the type delineated by claims 29-38.

The Examiner's attempt to associate Fisher et al. with a "play house" (Office Action dated March 9, 2009, page 8, penultimate line) is respectfully submitted to be pure hindsight, as the term "play house" does not appear in Fisher et al. and applicant is unaware of any "play house" constructed with concrete deck planks. On the other hand, if the Examiner is attempting to take official notice of a concrete play house, he is respectfully requested to provide an affidavit of such in accordance with MPEP 2144.03(C) and 37 C.F.R. § 1.104 (d)(2),

Accordingly, it is submitted that Fisher et al. is not properly considered to be analogous art.

The Examiner's appeal to Aschheim's disclosure of plastic as a possible material for his sustainer is submitted to be unavailing. Aschheim's sustainer is appointed for many uses other than supporting precast concrete planks. While plastic might be suitable for his sustainer in some applications, it clearly would not be for concrete construction like Fisher's. Thus, a skilled person, even if motivated *arguendo* to combine Aschheim with Fisher et al., would still have no motivation to employ a plastic sustainer, but would select material compatible with the requirements of concrete.

The Examiner has responded to applicant's position with respect to the substitution of plastic for steel in the Fisher et al. structure with the following statement:

> [I]t should be noted that it is known that some plastic materials are much stronger than steel and definitely Ascheim can attest to that since he himself suggests using plastic or steel. Obviously, one would recognize that the plastic has to be selected to withstand forces similar to steel as common sense.
>
> [Office Action dated March 9, 2009, at 17.]

Applicant is unable to locate any statement in Aschheim that in any way supports a contention that "some plastic materials are much stronger than steel." Even if Aschheim suggests that a plastic sustainer is, in some instances, usable, such disclosure falls far short of the inference the Examiner has drawn. For example, applicant is unaware of any plastic that is both "much stronger than steel" and "capable of having a metal fastener driven therethrough," as recited by claims 29 and 33.

Instead, applicant presumes that the Examiner has implicitly taken official notice of the supposed positions that "some plastic materials are much stronger than steel" and that plastics are known materials for supporting concrete structures, such as that of Fisher et al. In accordance with MPEP 2144.03(C) and 37 C.F.R. § 1.104 (d)(2), and to preserve applicant's argument on appeal, applicant requests that the Examiner provide an affidavit that supports the rejection of the claims based on the official notice, common knowledge, or personal knowledge of the Examiner. See *In re Lee*, 277 F.3d 1338, 1344-45, 61 U.S.P.Q.2d 1430, 1435 (Fed. Cir. 2002) (finding that reliance on "common knowledge and common sense" did not fulfill the PTO's obligation to cite references to support its conclusions as PTO must document its reasonings on the record to allow accountability and effective appellate review).

In view of the foregoing remarks, it is submitted that present claim 29 patentably defines over Fisher et al. and Aschheim. Accordingly, reconsideration of the

rejection of claim 29 under 35 USC §103(a) as being unpatentable over Fisher et al. and Aschheim is respectfully requested.

The Examiner has rejected claim 30 under 35 U.S.C. §103(a) as being unpatentable over Fisher et al. in view of Aschheim et al. and further in view of US Patent 6,442,908 to Naccarato et al. on the following basis:

> **Regarding claim 30, Fisher et al., as modified above, fail [to] disclose the vertical support member 14c having recesses with support columns located therebetween. Naccarato et al. teach, in Figs. 4 and 5, a vertical support member 14c having recesses 15 to promote optimal flow of grout material through the support member (col. 5, lines 29-35). Therefore, as taught by Naccarato et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to include recesses in the vertical support member to promote optimal flow of grout material through the support member. Applicant is reminded that columns will be inherently located between the recesses as shown in Figure 3 of Naccarato et al.**

Applicants respectfully note that the same three inventors are named in the Fisher et al. and Naccarato et al. patents, with only the ordering of the three names being different. In addition, Naccarato et al. delineates an overall structural framing system and method that are substantially similar to those of the Fisher et al. disclosure, as is apparent from a comparison of the respective Figs. 1-2 of each patent. Both Fisher et al. and Naccarato et al. disclose a dissymmetric steel beam having generally similar configuration and dimensions. Whereas the Fisher et al. beam is of generally solid construction, the Naccarato et al. beam has plural spaced, rectilinear or curvilinear openings 15. See col. 4, lines 54-56, of Naccarato et al. and also its Figs. 3-4, which are reproduced below for convenience. The openings 15 are said to promote optimal flow of the grout material 16 through and along the beam within the encasement area

during construction. Col. 5, lines 31-34. The framing construction and all materials are otherwise similar.

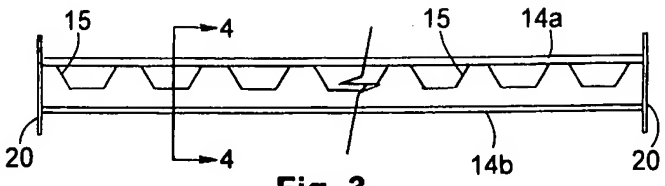


Fig. 3

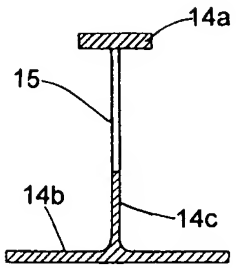


Fig. 4

(Naccarato et al., US Patent 6,442,908)

It is respectfully submitted, for the reasons set forth above, that Naccarato et al. does not materially supplement the teaching of Fisher et al. At best, Naccarato et al. discloses perforation of the Fisher et al. dissymmetric steel beam, but it does not otherwise suggest changing its dimensions or basic functioning. The perforation would, if anything, require increasing the thickness of the remaining portions of the dissymmetric steel beam to compensate for material removed. The overall concrete and steel structures taught by the respective patents are virtually identical. Accordingly, it is submitted that even the addition of Naccarato et al. does not cure the lack of disclosure or suggestion of the anchoring device of claim 29, from which claim 30 depends. Even less does the combination of the references disclose applicant's claimed anchoring device having a plurality of recesses with support columns located therebetween. It is respectfully submitted that the perforated dissymmetric steel beam

of Naccarato et al. still does not disclose or suggest the far smaller molded plastic anchoring device of claim 30. For the reasons set forth above in connection with the rejection of claim 29, applicant maintains the Examiner's appeal to Aschheim for use of plastic equally unavailing in the present rejection of claim 30.

Applicant further maintains, for reasons set forth above in connection with the rejection of claim 29, that there is no motivation to modify any structure provided by Fisher et al. to reach the anchoring device of claim 29. It is respectfully maintained that those reasons apply with equal force to establish that there is no motivation to modify even the combination of Fisher et al. and Naccarato et al. to reach the anchoring device of claim 29, or that of claim 30 dependent therefrom.

The Examiner has contended that it would have been obvious to include recesses in the vertical support member to promote optimal flow of grout material through the support member. While Naccarato et al. admittedly discloses that a perforated dissymmetric steel beam permits a better grout flow than the solid beam provided by Fisher et al., applicant respectfully submits that this supposed motivation has no pertinence to the anchoring device of claims 29 and 30. Clearly, no grouting is disclosed or suggested by the present application. The Examiner has not pointed to any other motivation to suggest the use of the present anchoring device in conjunction with grout. To the contrary, the present decking system would be unworkable, were it to be installed with grouting in the manner taught by Fisher et al. and/or Naccarato et al., because the gaps between decking boards that permit collected water to drain would thereby be sealed.

The reasons set forth above with respect to Fisher et al. as not being analogous art for claim 29 are submitted to apply with equal force to Naccarato et al., which also discloses a concrete plank and steel frame structure completely unlike the decking and support delineated by applicant. Accordingly, it is submitted that neither Fisher et al. nor Naccarato et al. is properly considered art analogous to claim 30, rendering their use in the present obviousness rejection of claim 30 improper.

Accordingly, it is submitted that no motivation for the combination of Fisher et al. and Naccarato et al. in the manner proposed by the Examiner has been provided, nullifying the propriety of the present rejection.

In the Office Action dated March 9, 2009, the Examiner has challenged applicant's purported repeated references to the Naccarato device as being "asymmetrical." Applicant respectfully observes that a word search of the amendment submitted February 12, 2009 does not reveal any instance of this term. (Nor is the term used in the present submission.) The Examiner may have misread the term "dissymmetric," which was used several times. It is noted that the term "dissymmetric" is Naccarato's own term. It is used in the patent's title and appears some five times in the abstract, twenty times in the claims, and fifty-three times in the remainder of the specification, generally in the term "dissymmetric beam." The term is similarly used many times in Fisher et al. Applicant can hardly be faulted for adopting a term that both Fisher and Naccarato use in their titles and clearly regard as central to the characterization of their patents. Furthermore, the Examiner has dismissed applicant's arguments concerning the pertinence of Naccarato with the summary claim that "one cannot show nonobviousness by attacking references individually where the rejections

are based on combinations of references. Office Action dated March 9, 2009, at 18. To the contrary, many of the foregoing arguments lie precisely in the inoperability of devices constructed in accordance with the references as combined by the Examiner.

In view of the foregoing remarks, it is submitted that present claim 30 patentably defines over the combination of Fisher et al., Aschheim, and of Naccarato et al. Accordingly, reconsideration of the rejection of claim 30 under 35 USC §103(a) over Fisher et al. in view of Aschheim and further in view of Naccarato et al. is respectfully requested.

Claims 33 and 35-38 were rejected under 35 U.S.C. §103(a) as being unpatentable over British Patent GB 1,567,008 to Edwards, in view of US Patent No. 5,182,891 to Slocum, and further in view of US Patent No. 2,362,252 to Ellinwood and European Patent No. EP 863,317 to Eberle.

In view of the cancellation of claim 35, the following remarks are addressed to claims 33 and 36-38, as amended.

Edwards relates to a locking member useful in securing a vertical panel construction. The locking member is configured to be inserted in a gap between the parallel edges of adjacent, generally vertical panels and turned by a tool, causing it to engage the adjacent panels. The member thus maintains the panels in a fixed position relative to each other, but it has no connection to any other structural member.

Slocum provides a flooring construction including a unitary construction with a top layer providing a finished flooring surface and an insulation layer adjacent the top layer. The Slocum construction involves the use of an interlock support member

that engages grooves in adjacent floor panels. However, one of the required functions of the support member is to space the finish floor panels above the underlying structure. Slocum fails to teach any use of a fastener driven through the support member.

Ellinwood relates to a wall structure comprising a pair of adjacent wallboard panels having meeting edges, each of the panels being formed with a groove opening into its meeting edge. The groove in each panel provides outer and inner lips, with the outer lips being in abutting relation. A joining strip is permanently secured to the under surface of the outer lips, and the inner lips are spaced, with a T-shaped connecting member movably positioned in the groove and having a base in spaced relation to the inner lips, and means for anchoring the connecting member to a structural element.

Eberle relates to an anchoring biscuit device for joining three boards.

The Examiner has stated that Edwards discloses, in Figures 1 and 2, a decking system comprising decking boards P1 and P2, a support board T, and an anchoring device A1. It is alleged that at least one groove is located along one of the sides of the decking boards.[4]

Applicant respectfully traverses the Examiner's identification of these various elements. Contrary to the Examiner's contention, items P1 and P2 are identified by Edwards specifically as wall panels, not decking boards. Structure T is not a support board. Rather, it is clearly the bottom part of the locking member and inseparable from it. Structure T also does not carry any weight of panels P1 and P2,

[4] Although the present Office Action alludes to a marked-up attachment relating to Figs. 1 and 2 of Edwards, no such attachment was included in the paper sent to applicant, nor is any such attachment included in the Image File Wrapper available through the PAIR system.

further negating any fair reading of it as a support board. Instead, panels P1, P2 are attached to upper and lower supporting beams by screws passing directly through their peripheral frames. Page 1, col. 2, lines 54-59. By way of contrast, the Edwards installation thus negates one of the benefits of applicant's anchoring device, namely that it permits attachment of decking boards without the need for any fastener to pass through the decking boards themselves. *See* specification as originally filed at page 33, lines 2-5.

The inside and outside surfaces of panels P1, P2 cannot be conflated, as apparently done by the Examiner, because of the way the locking member is installed. Edwards calls for arms 10 of head 8 to be on the outside face of the panel system, so that a suitable tool can engage head 10 to rotate it into anchoring position, in which teeth 4 are (forcibly) driven into the edges of frames F1 and F2. *See* p 3 col. 2, line 80-81. Were arms 10 placed on the inside of the wall panel system, there would be no possibility of engaging head 8 either during initial installation or later to permit modification of the panel system. Edwards specifically teaches the desirability of being able to remove a panel (and necessarily the locking member). Such an operation would be impossible if the locking members were on the inside of the panels, as required by the Examiner's reading. *Compare* page 3, col. 2, lines 118 *et seq.*

Furthermore, panels P1 and P2 do not include any groove adapted to receive an anchoring device. Rather, it is the installation process itself that creates the only structure that could possibly be called a "groove." Specifically, the process of installing the locking member is said to involve rotating the member, causing teeth to

be driven into the wooden edge members F1, F2 of the panels (see page 3, col. 2, lines 94-96). Clearly, Edwards does not contemplate a pre-formed groove.

The Examiner's position requires an impermissibly strained reading of the Edwards teaching. Specifically, the Examiner has equated what Edwards calls "trim strip T" (*see* page 3, col. 2, line 113) with applicant's support board, atop which the decking boards are situated and rest. This necessarily requires that what Edwards calls the "outside faces" of panels P1, P2 (page 3, col. 2, lines 80-81) be regarded as being "atop" and "resting on" the purported support board, as recited by claim 33.

Furthermore, the locking element of Edwards is constructed with the relative widths of the elements, as identified by the Examiner, that are opposite what claim 33 requires. In particular, the Examiner has identified feature 4 as the "top" element and feature 8 as the "bottom" element. Inspection of Edwards' Figs. 1 and 2 clearly indicates that the width at feature 4 is less than the width at feature 8, whereas claim 33 requires that "said first [i.e., top] predetermined width is greater than both said second [i.e., middle] predetermined width and third [i.e., bottom] predetermined width.

Recognizing this contradiction, the Examiner has pointed to Fig. 10 of Eberle as motivating a modification to make the top width greater, so that the anchoring device can be toe-nailed or screwed to the support board, preventing the anchoring device from moving.

Applicant respectfully traverses the proffered motivation, submitting that it lacks coherency, because there is no logical connection established between the respective widths of the top and bottom elements and the ability to anchor the device with a nail or screw fastener. Nothing in the statement explains how the device

prevents movement after the nailing or screwing operation is completed. Once anchored, there is no issue of the anchoring device moving.

The Examiner has further pointed to Eberle as teaching, in Fig. 10, an anchoring device having a first width greater than a third width. It is respectfully noted that Fig. 10 of Eberle is said to be an end-view of a device also depicted in top and side views by Figs. 8-9, respectively. As shown most clearly in Fig. 8, the top view of the Eberle device has arcuate sides, not the parallel sides recited by claim 33 as amended. Eberle further teaches that the attachment of the device of Figs. 8-10 is made with a nail or screws that are driven only through holes 113 in bottom horizontal extended member 119, and not with fasteners driven through the anchoring device itself, as recited by claim 33. Because of the width of the bottom member, the placement of the Eberle device causes the decking boards to be held away from the supporting board, as seen, e.g., in Figs. 6-7 of Eberle. The Examiner has further suggested that Eberle would make it obvious to change the sizes of the elements of the anchoring device taught in Edwards so that the device may be toe-nailed or screwed to the support board to prevent the anchoring device from moving. Applicant respectfully traverses this allegation, because modification of the Edwards device in conformity with the Examiner's suggestion would render it incapable of performing its intended function.

Separately and independently, a skilled person would recognize that changing the relative sizes of features 4 and 8 of the Edwards device would defeat the function set forth by the patentee. In particular, the Edwards device is appointed to be installed by rotating it into position, causing teeth 4 to dig into the wooden side frames of panels P1, P2. Were bottom arms 10 of feature 8 made narrower than teeth 4, the

mechanical advantage afforded by the greater moment arm of long arms 10 over short arms 4 would be lost. Instead, the force applied at arms 10 would have to be greater than the resistance experienced by the teeth cutting into the panel frame to effect the installation. Even with the further mechanical advantage imparted by a wrench or like tool, the installation would be more difficult and there would be serious risk of shearing off arms 10. In such light, applicant maintains that far from being motivated to make the change proposed, a skilled artisan would be motivated not to make this substantial reconstruction.

A further distinction between Fig. 10 of the Eberle reference and the present anchoring device is provided by the difference in top view configuration of the Fig. 10 device, which includes arcuate sides, as manifest in Fig. 8, which is said to be a top view of the Fig. 10 device. *See* col. 3, line 56, through col. 4, line 1. It is also respectfully submitted that Eberle teaches away from the use of a fastener driven through the Fig. 10 anchoring device. Instead, holes 113, 117 are provided that penetrate solely the base element 119 of Figs. 8-10, and not the entire anchoring device. *See, e.g.,* col. 5, lines 25-31 and claim 5.

The Examiner has admitted that Edwards teaches a locking member made of metal, not plastic, and has pointed to Slocum as disclosing plastic anchoring devices. He has contended that selecting a known material based on its suitability for an intended use is a design choice within the general skill of an artisan, relying on *In re Leshin*, 125 USPQ 416. Applicant traverses this contention, inasmuch as the fundamental factual predicate of *Leshin* – that the material be suitable for an intended use – is not satisfied. In particular, it is only in hindsight that one could allege that the

"intended" function of any fastener constructed in accordance with the teachings of Edwards and Slocum, whether taken singly or in combination, is the function of applicant's anchoring device. Applicant requires that the fastener be attached to a support board by a metal fastener (e.g., nail, screw, staple, or the like) and that the adjacent boards rest on the support board. Edwards, pertaining only to a wall system, clearly does not teach such a support function. The Slocum device pointedly teaches away from a construction in which flooring panels rest on any support board. Rather, the Slocum device necessarily elevates the flooring panels above the supporting structure, the panels instead resting on the Slocum interlocking device. While plastic may be suitable for the Slocum device, the Edwards anchoring device would be rendered inoperative if made of plastic.

More specifically, the Edwards locking member inherently could not function if it were modified by constructing it of "molded plastic material capable of having a metal fastener driven therethrough," as required by claim 33. The functioning of the Edwards member requires that it be able to withstand being turned by a tool (page 3, col. 2, line 88-89) so that teeth 4, 4' can be moved into engagement and driven into a wooden frame member (page 3, col. 2, lines 78-79 and 91-96). The device clearly must sustain a considerable force for this rotation to be made. Accordingly, Edwards teaches the use of mild steel or aluminum alloy for the member (page 3, col. 1, lines 15-19). Were the Edwards locking member made of plastic, it clearly would lack the structural integrity needed for it to survive being turned by a tool forcibly engaging its teeth with the panel frames. Applicant respectfully submits that this inoperability

separately precludes a finding of obviousness under the standard of *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Recognizing the failure of Edwards and Slocum to teach the feature of a metal fastener driven through the anchoring device as required by claim 33, the Examiner has further cited Ellinwood. Like Edwards, Ellinwood is directed to a wall or ceiling panel system, not a decking system. Clearly, the anchoring device Ellinwood discloses has a T-shape distinct from that of the claimed anchoring device.

However, in the modification proposed by the Examiner, the fastener would be driven first through the support board and only then through the anchoring device, opposite applicant's claimed construction.

In view of the amendment of claim 33, the cancellation of claim 35, and the foregoing remarks, it is submitted that claims 33 and 36-38 dependent thereon patentably define over Edwards, Slocum, Ellinwood, and Eberle. Accordingly, reconsideration of the rejection of claims 33 and 35-38 under 35 USC §103(a) as being unpatentable over Edwards, Slocum, Ellinwood, and Eberle is respectfully requested.

Claim 34 was rejected under 35 U.S.C. §103(a) as being unpatentable over Edwards, in view of Slocum, Ellinwood, and Eberle, and further in view of US Patent No. 4,154,172 to Curtis, Jr., which relates to a system for attaching floor decking to a railroad car having an open floor structure of flanged beam members.

Applicant respectfully submits that the addition of Curtis, Jr. fails to cure the lack of disclosure or suggestion in Edwards, Slocum, Ellinwood, and Eberle of the decking system of amended base claim 33, from which claim 34 depends. Distinctions between the decking system of amended base claim 33 and any system disclosed or suggested by the combination of Edwards, Slocum, Ellinwood, and Eberle are set forth hereinabove in connection with the foregoing obviousness rejection of claims 33 and 35-38 over said references.

Applicant reiterates the remarks set forth above in connection with the rejection of claim 30 over the Child British patent and Curtis, Jr., concerning the engagement of the Curtis fastening device to a supporting I-beam as being entirely different from the configuration of applicant's decking system, in which the bottom of the anchoring device is placed upon the supporting joist. As delineated above, the Curtis device engages a supporting I-beam using a slot in the side of the vertical portion of the fastening member. The slot receives the top flange of the I-beam, a clearly different form of engagement.

In view of the foregoing remarks, it is submitted that present claim 34 patentably defines over Edwards, Slocum, Ellinwood, Eberle, and Curtis, Jr. Accordingly, reconsideration of the rejection of claim 34 under 35 USC §103(a) as being unpatentable over Edwards, Slocum, Ellinwood, Eberle, and and Curtis, Jr., is respectfully requested.

The Examiner has also cited French Patent Publication FR-1,217,468 to Peynichou, French Patent Publication FR-1,556,252 to Bois, and US Patent 186,453 to

Dickinson, but has not applied any of these references. Clearly, none of these references, whether taken singly or in combination with any of the art of record, discloses or suggests the subject matter of claims 29-34 and 36-38, as amended.

CONCLUSION

In view of the amendment of the specification, the amendment of claims 29 and 33, the cancellation of claim 35, the amendment of the drawings at Fig. 7 and newly presented Fig. 9, and the foregoing remarks, it is respectfully submitted that the anchoring device of claim 29 (and claims 30-32 dependent thereon); and the decking system of amended claim 33 (and claims 34 and 36-38 dependent thereon) are not disclosed or suggested by any combination of the art references applied, and thus meet the conditions for patentability required by 35 U.S.C. §§ 102, 103(a), and 112. The present application is thus believed to be in condition for allowance.

Accordingly, entry of the present amendment, reconsideration of the objection to the drawings and the rejection of claims 29-38, and allowance of the present application are earnestly solicited.

Respectfully submitted,

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Appendix

Replacement and New Drawing Sheets